



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,811	02/04/2004	Bernard Warnakulasooriya	130-022	3967
62898 7590 09/21/2007 MCGUINNESS, MANARAS & EMC 125 NAGOG PARK ACTON, MA 01720			EXAMINER PHAN, RAYMOND NGAN	
			ART UNIT 2111	PAPER NUMBER
			MAIL DATE 09/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/771,811

Applicant(s)

WARNAKULASOORIYA ET AL.

Examiner

Raymond Phan

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Part III DETAILED ACTION

Notice to Applicant(s)

1. This action is responsive to the following communications: amendment filed on July 4, 2007.
2. This application has been examined. Claims 1, 3-7 are pending.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objection

As per claim 1, the claimed language, "...the serial bus for collecting environmental and status information...", is vague and indefinite. The serial bus technically does not collect any information itself. Applicants are requested to explain how the serial bus collects information itself.

As per claim 4, the claimed language, "...the serial bus for propagating environmental and status information...", is vague and indefinite. The serial bus technically does not propagate any information itself. Applicants are requested to explain how the serial bus propagates information itself.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Price (US No. 6,833,634) in view of Gavlik (US No. 6,745,325).

In regard to claims 1, 4-5, Price discloses an apparatus comprising a plurality of serial bus controllers 438 (see figure 4B); a serial bus 434 coupled to the plurality of serial bus controllers 438 (see figure 4B, col. 10, lines 5-21), the controller for collecting environment (see col. 9, lines 37-50) and status information associated one or more devices included in the enclosure (see col. 9, lines 16-36); an arbitration mechanism for controlling access to the serial bus by the plurality of serial bus controllers (see col. 10, lines 48-64), the arbitration mechanism comprising a redundant control line, wherein each serial bus controllers includes a circuit for monitoring the control lines to ascertain whether the serial bus is in use (see col. 10, lines 31-47). But Price does not specifically disclose wherein each of the plurality of serial bus controllers is assigned a different number n of a period t_d for driving the control signal after a delay t_1 when seeking to take control of the serial bus. However Gavlik discloses the serial interface controller comprising each of the plurality of serial bus controllers is assigned a different number n of a period t_d for driving the control signal after a delay t_1 when seeking to take control of the serial bus (see col. 8, line 27 through col. 9, line 35). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Gavlik into the teachings of Price because it would provide full autonomous programming of multiple microcontrollers via 2-wire interface.

In regard to claims 3, 6-7, Gavlik discloses a circuit in each of the serial bus controllers for driving the control lines for a predetermined period of time if the serial bus is not in use, and for then releasing the control lines and monitoring the control lines to ascertain whether the control line are being driven by the another controller (see col. 8, line 27 through col. 9, line 35). Therefore, it would have

been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Gavlik into the teachings of Price because it would provide full autonomous programming of multiple microcontrollers via 2-wire interface.

Response to Amendment

6. Applicant's amendment and arguments, see on pages 13, filed on July 4, 2007, with respect to the rejection of claims 1, 3-7 under 35USC103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Price.

Conclusion

7. Claims 1, 3-7 are rejected.

8. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

Brown et al. (US No. 7,216,195) disclose an architecture for managing disk drives.

Warnakulasooriya et al. (US No. 7,154,723) disclose a highly available dual serial bus architecture.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (571) 272-3630. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM. The Group Fax No. (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or

Art Unit: 2111

Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 central telephone number is (571) 272-2100.

A handwritten signature in black ink, appearing to read 'Raymond Phan', with a long, sweeping horizontal stroke extending to the right.

Raymond Phan
Patent Examiner
Tech Center 2100